

FIG. 1

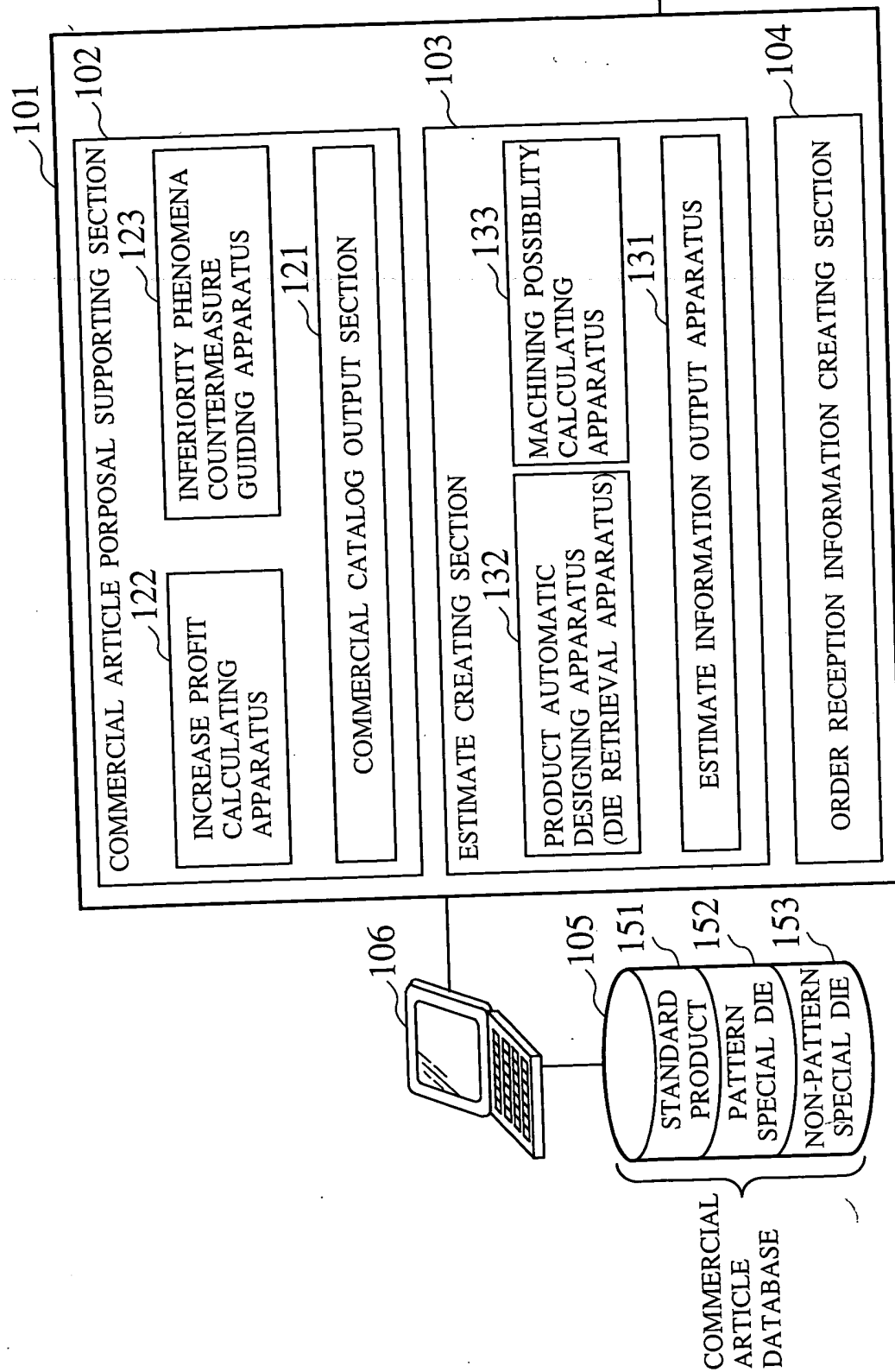


FIG. 2

200

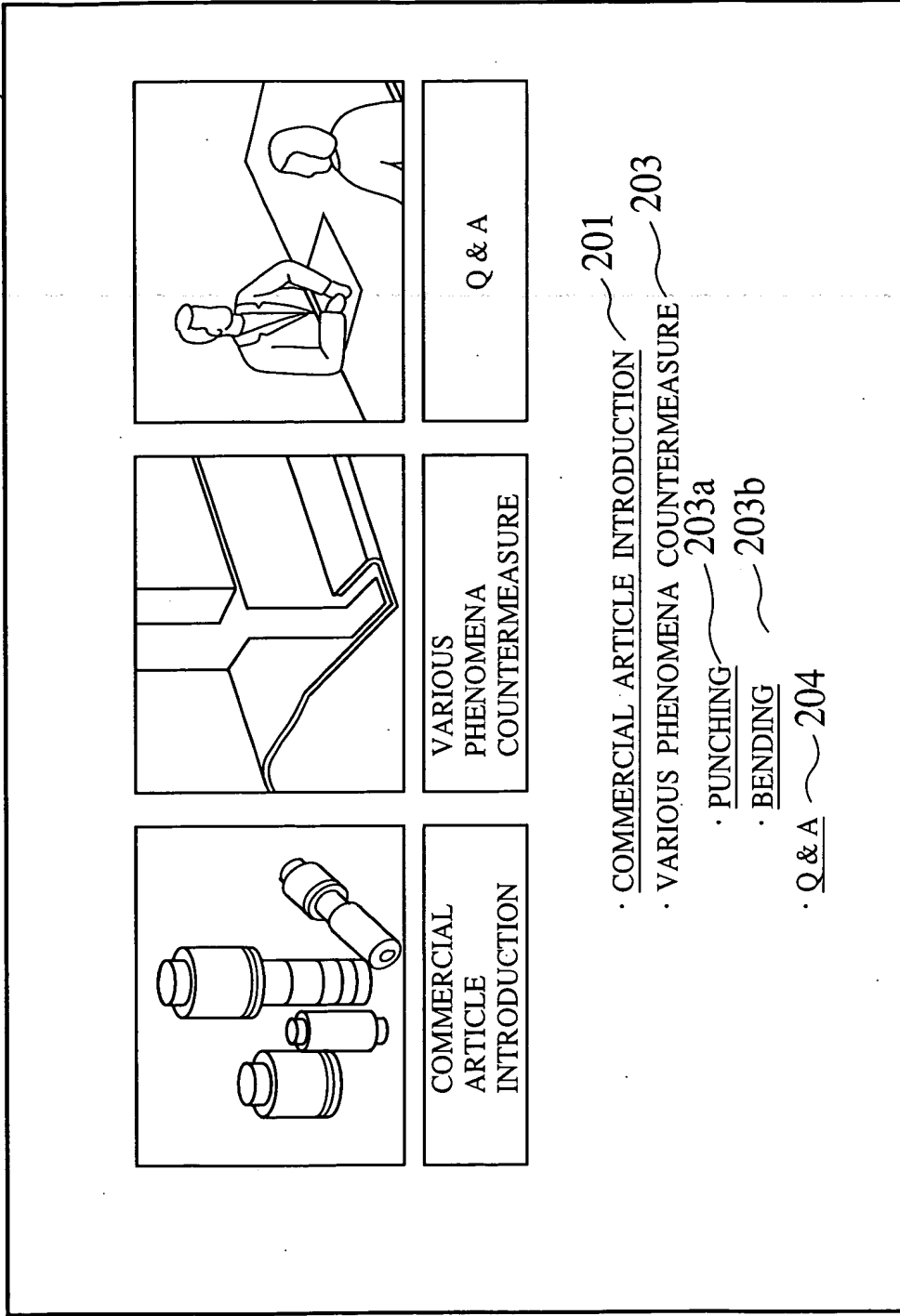




FIG.4

207

PROPOSAL FOR INCREASE PROFIT

TRIPLE HOLDER SEMI-AUTOMATIC TRIPLE HOLDER

HOME MENU

TRIPLE HOLDER INCREASE PROFIT 207a

(A) NUMBER OF HOLDER EXCHANGES PER ONE DAY? ~ 207b : 10 TIMES ~ 207e

(B) HOLDER EXCHANGE TIME PER ONE EXCHANGE? : 15 MIN. ~ 207f

(C) LABOR COST OF WORKING PERSON PER ONE HOUR? : 3000 YEN ~ 207g

(D) WORKING DAYS PER ONE MONTH? ~ 207d : 22 DAYS ~ 207h

CALCULATION

LABOR COST REQUIRED FOR HOLDER EXCHANGE

● SINGLE HOLER

LABOR COST PER ONE HOUR × EXCHANGE TIME PER ONE × NUMBER OF EXCHANGES PER ONE DAY × WOKING DAYS PER ONE MONTH = 165,000 YEN

● TRIPLE HOLDER 207i

HOLDER EXCHANGE TIMES BECOMES 1/3 SINCE BECAUSE THREE DIES CAN BE MOUNTED ON TRIPLE HOLDER

LABOR COST PER ONE HOUR × EXCHANGE TIME PER ONE TIME × NUMBER OF 207j EXCHANGES PER ONE DAY × 1/3 × WORKING DAYS PER ONE MONTH = 55,000 YEN

INCREASE PROFIT PER ONE MONTH = LABOR COST OF CONVENTIONAL SINGLE HOLDER - LABOR COST OF INTRODUCED TRIPLE HOLDER = 110,000 YEN

RETURN 207k

FIG. 5

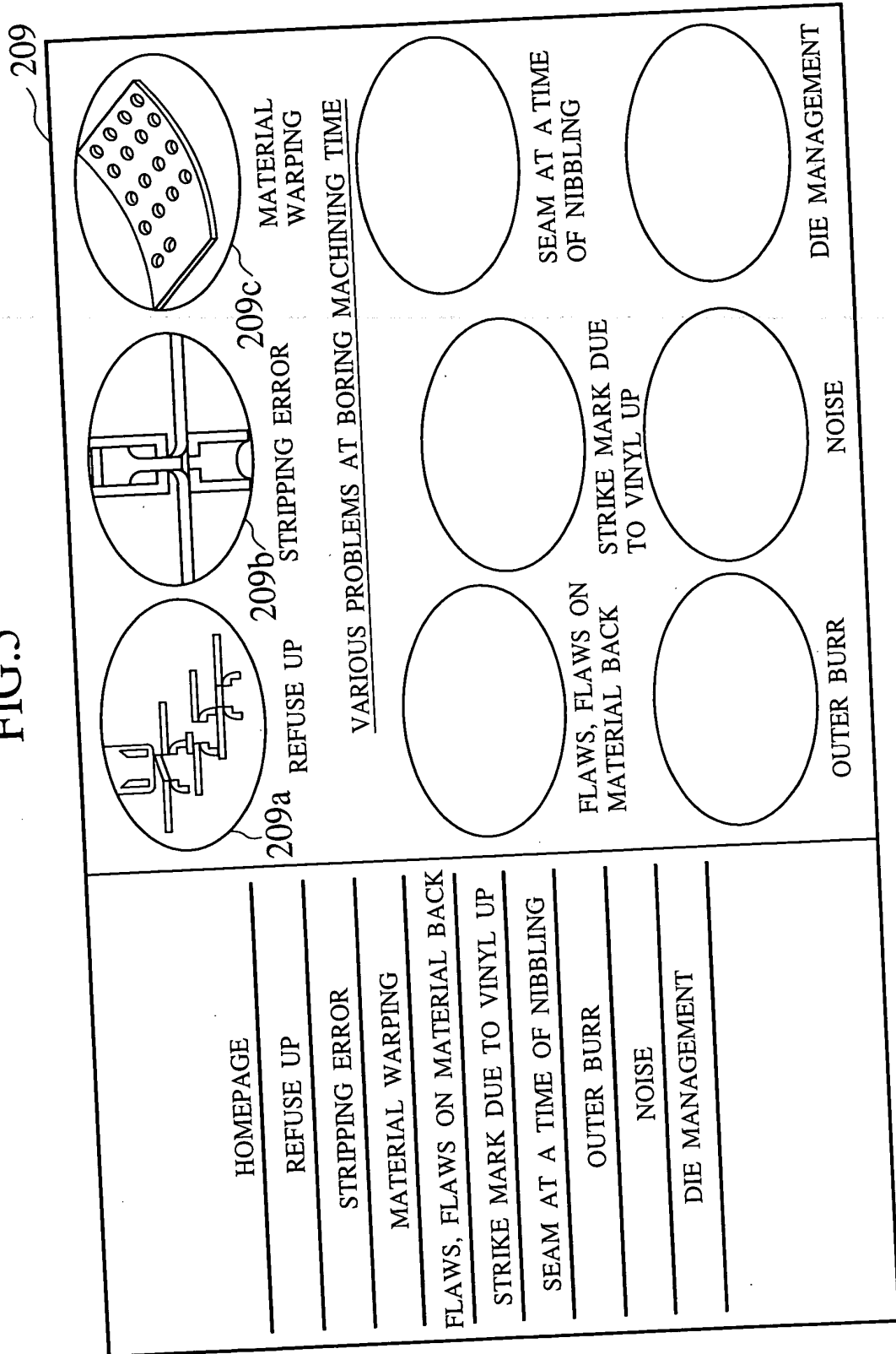


FIG. 6

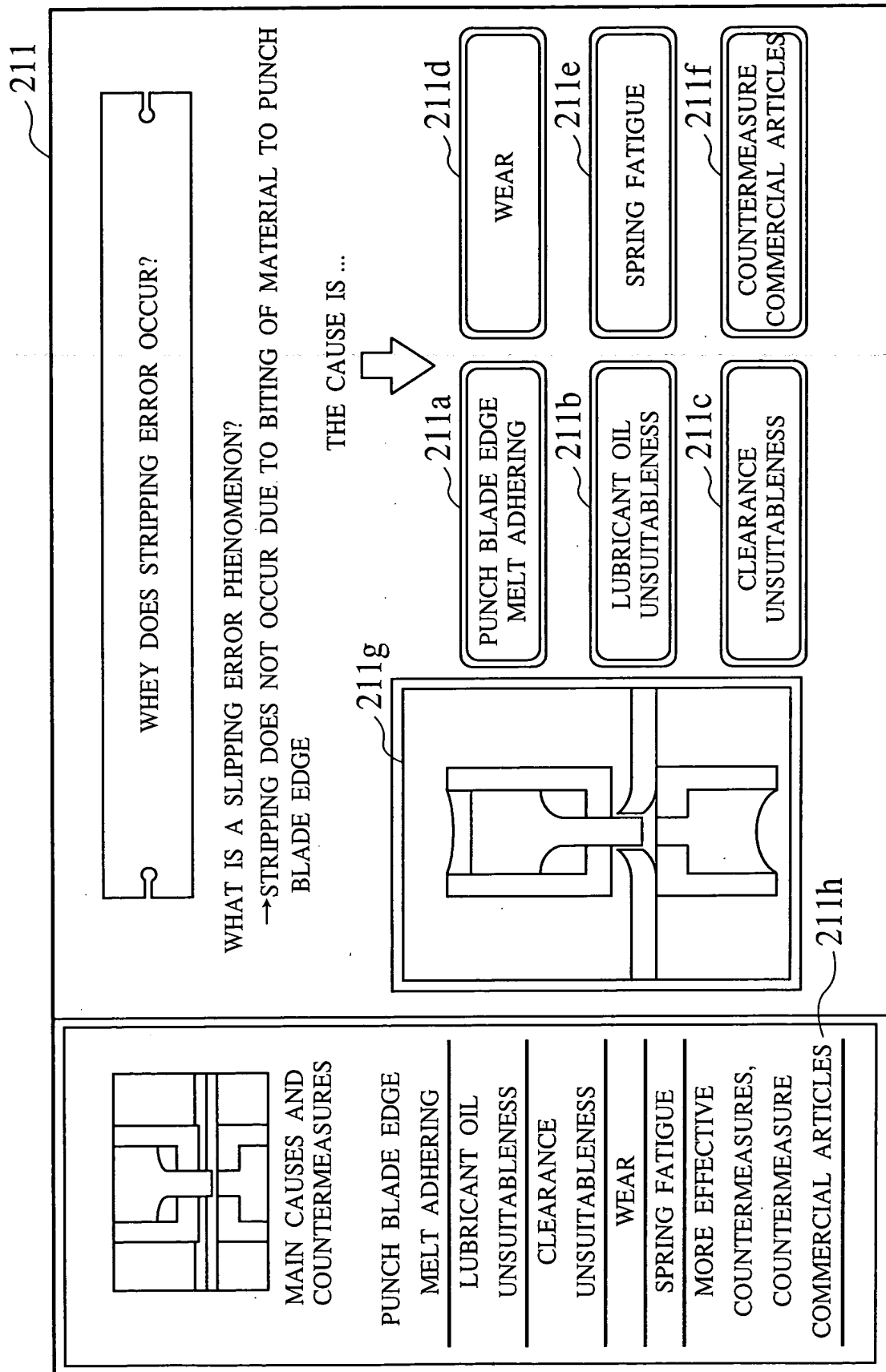


FIG. 7

213

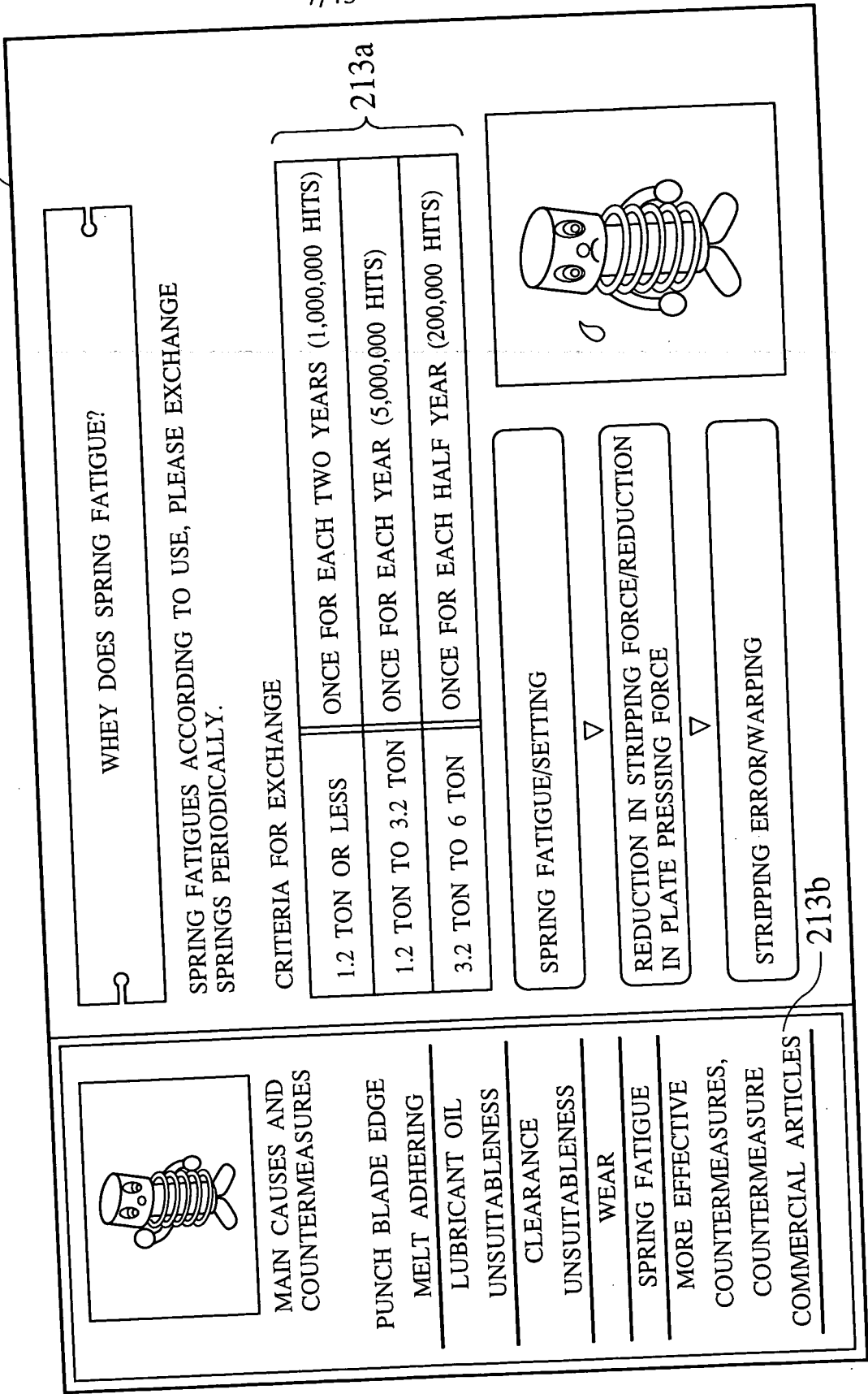


FIG.8

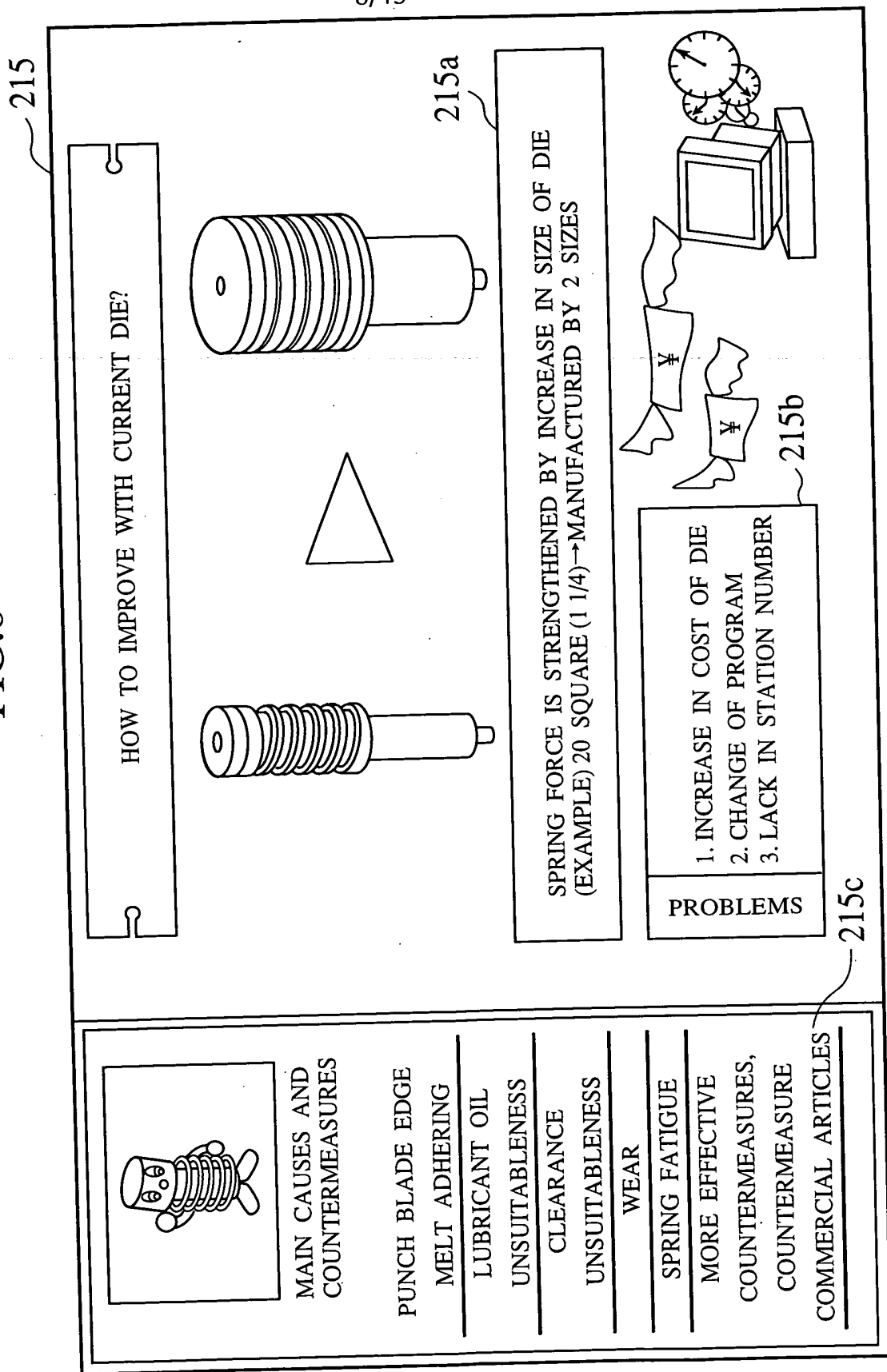
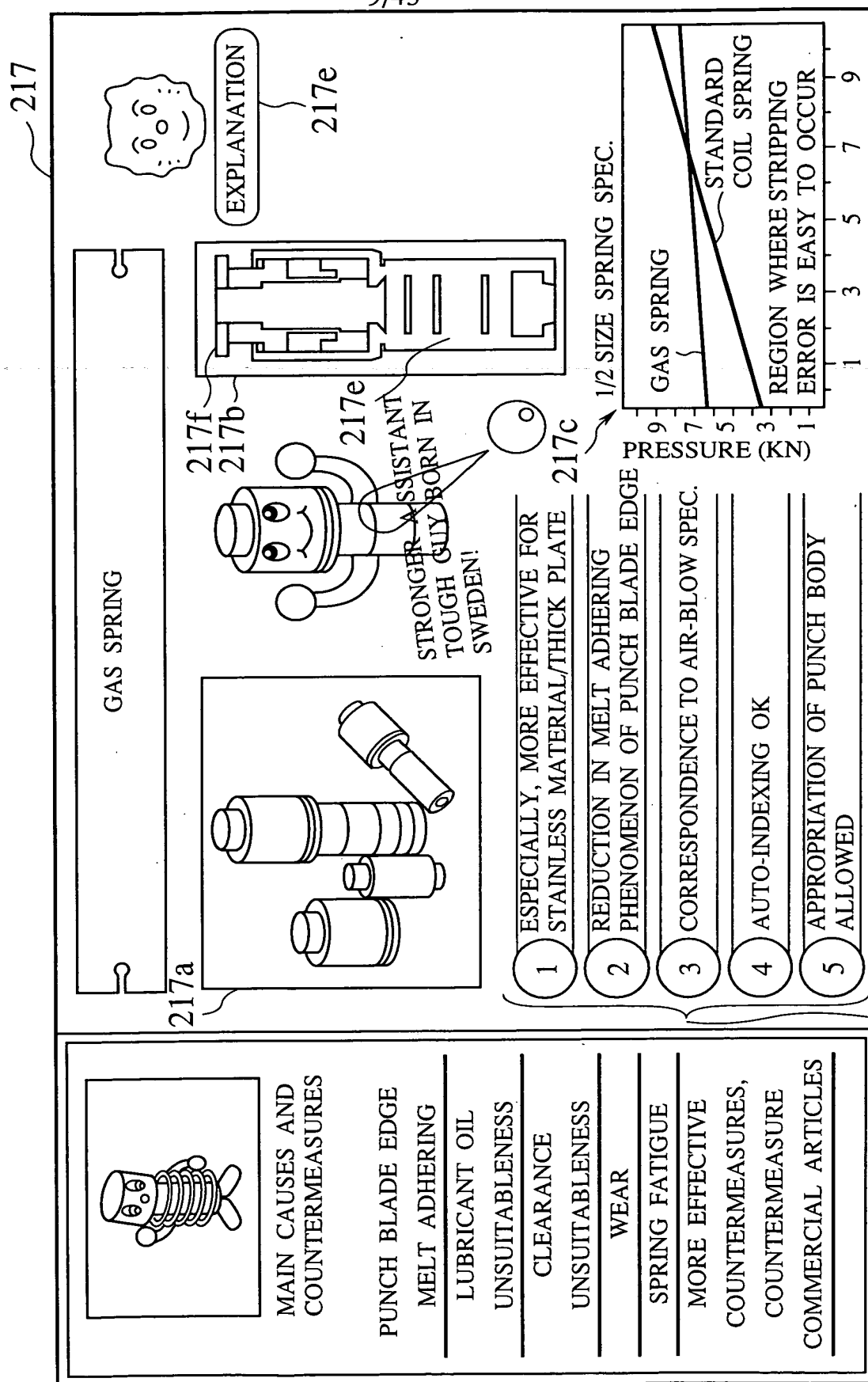




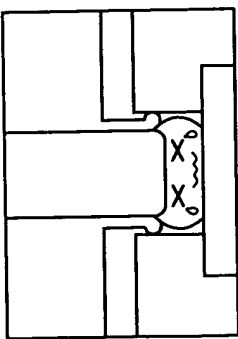
FIG. 9



217d

FIG.10

219

|   |  |
|---|--|
|  |  |
| MAIN CAUSES AND COUNTERMEASURES   |  |
| PUNCH BLADE EDGE  |  |
| MELT ADHERING   |  |
| LUBRICANT OIL   |  |
| UNSUITABLENESS  |  |
| CLEARANCE   |  |
| UNSUITABLENESS  |  |
| WEAR  |  |
| SPRING FATIGUE  |  |
| MORE EFFECTIVE COUNTERMEASURES, COUNTERMEASURE                                      |  |
| COMMERCIAL ARTICLES   |  |

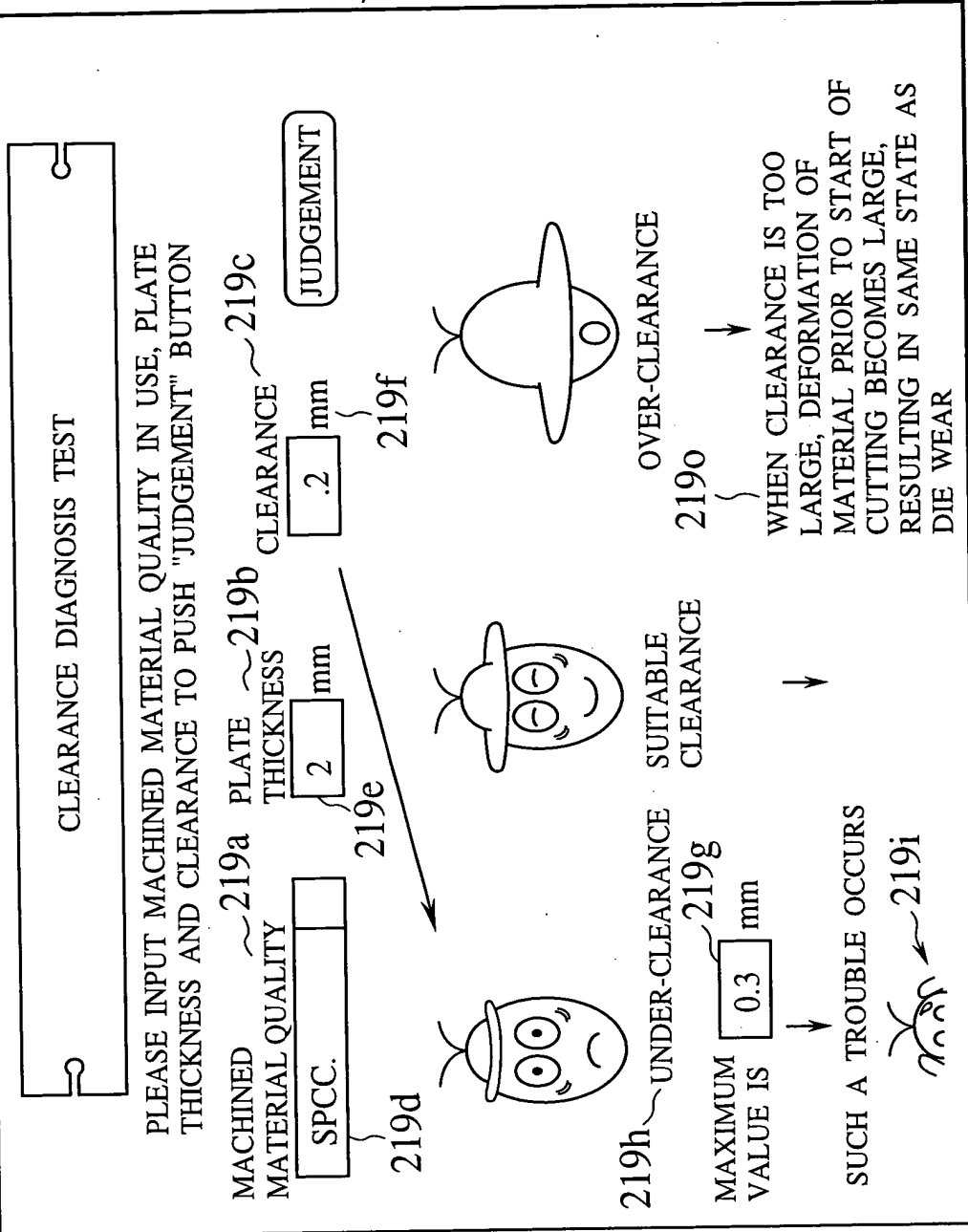


FIG. 11

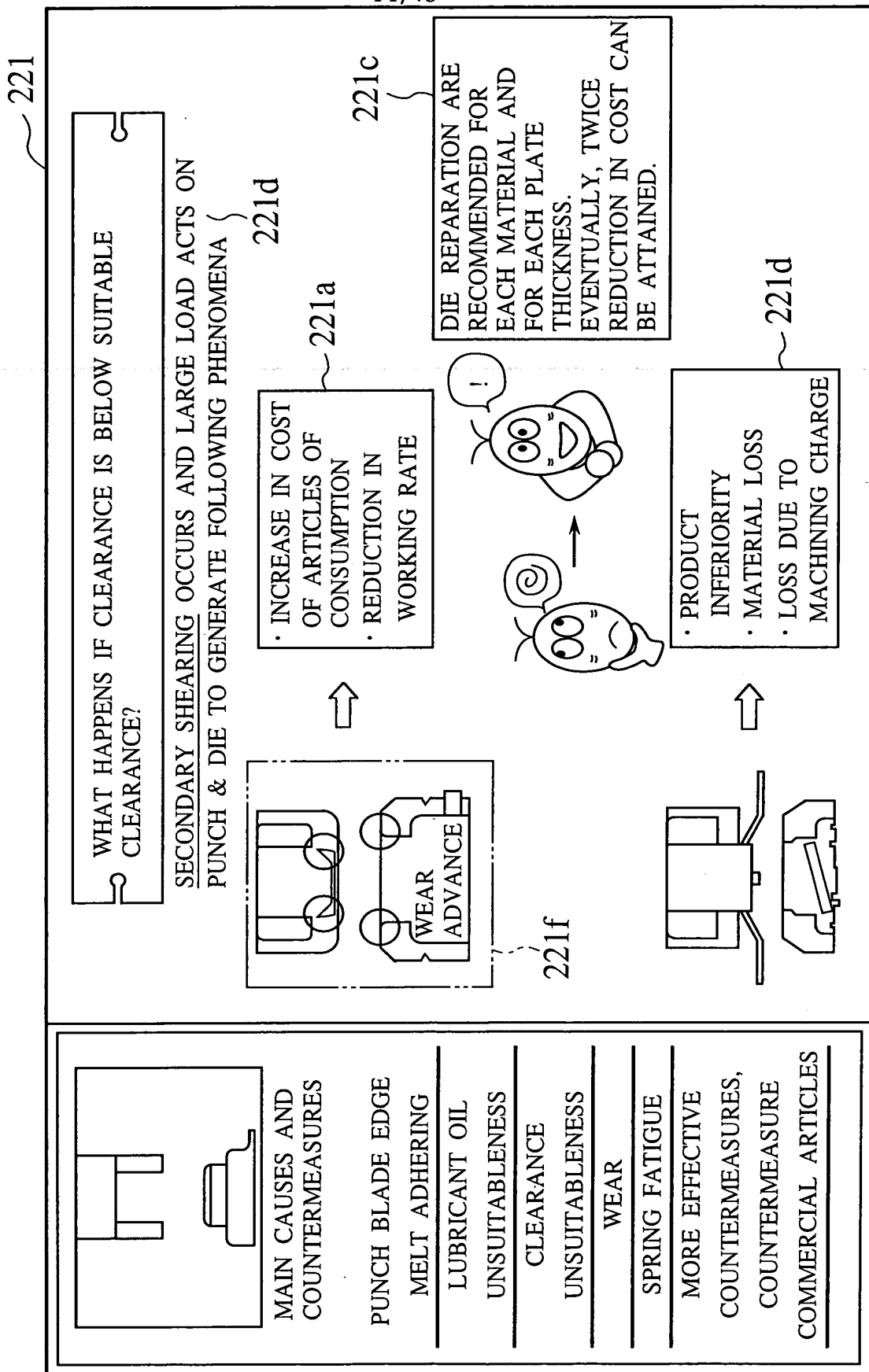
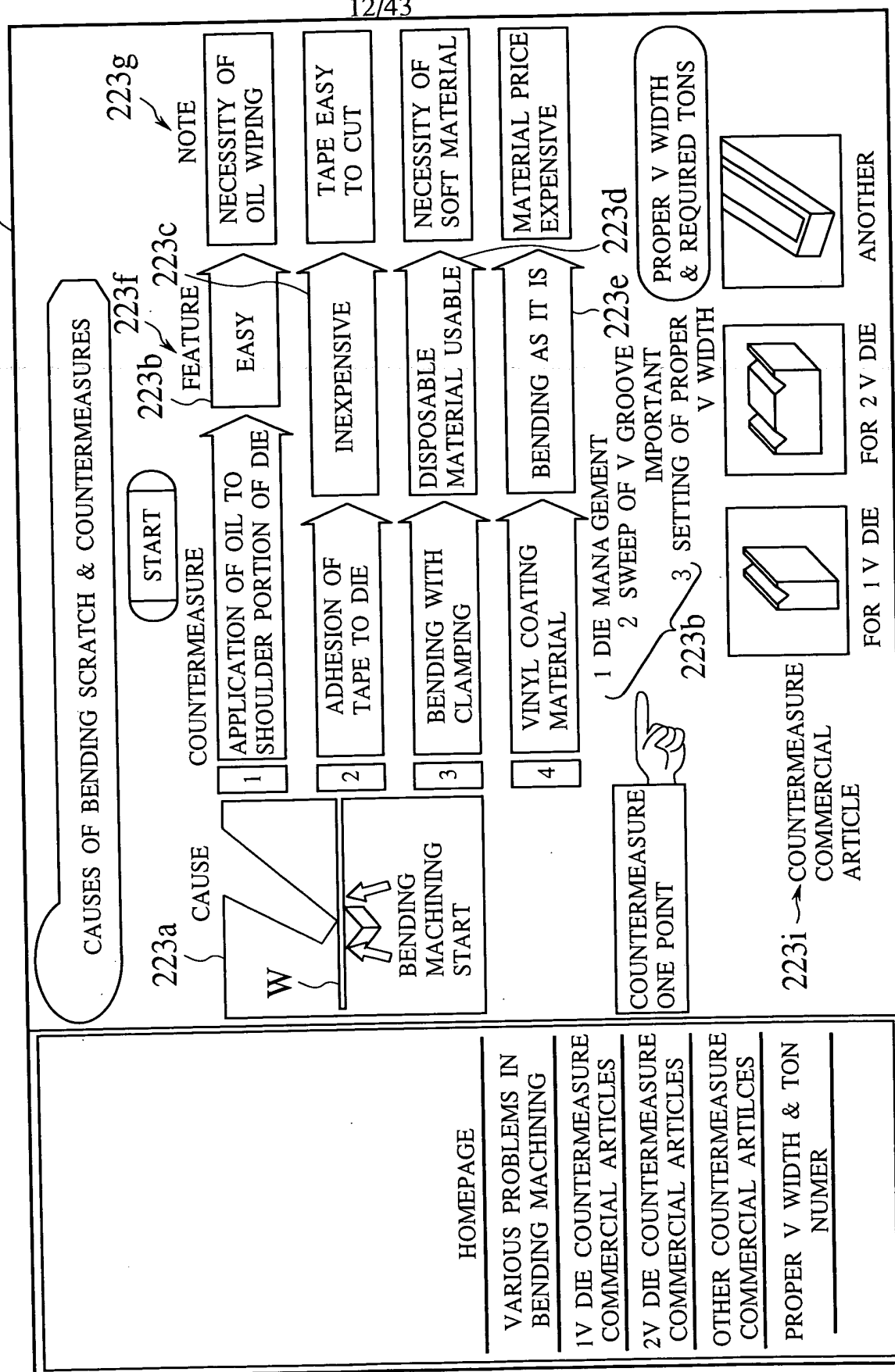


FIG. 12

223



225

FIG.13

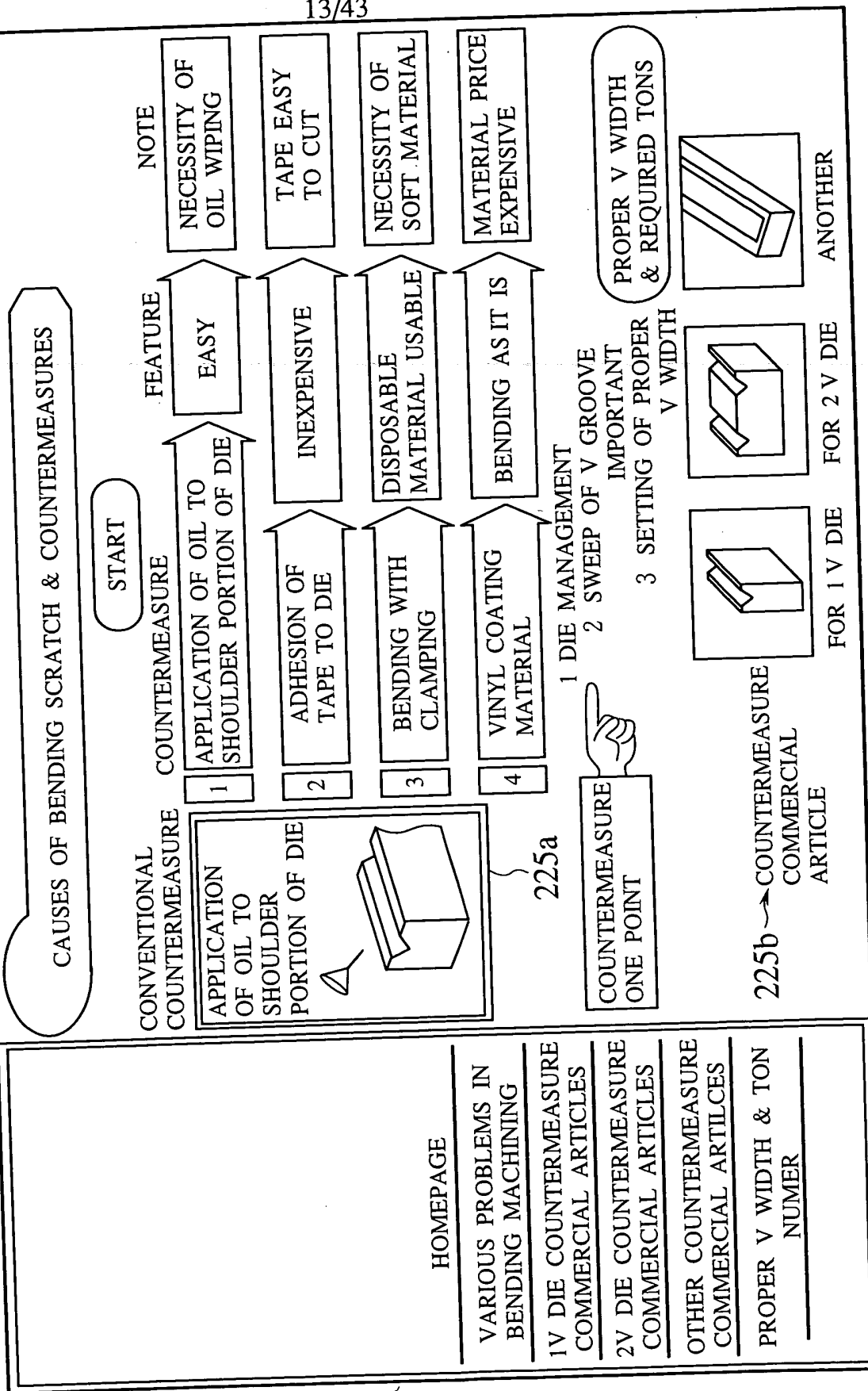


FIG.14

225

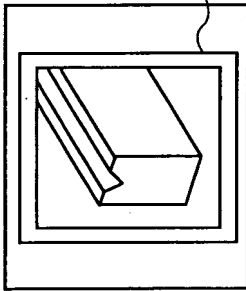
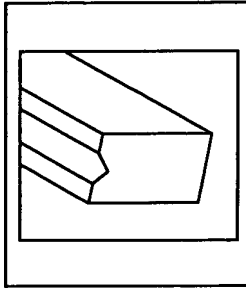
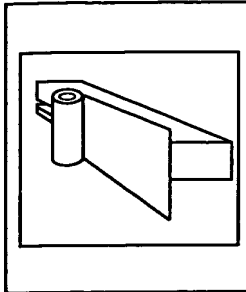
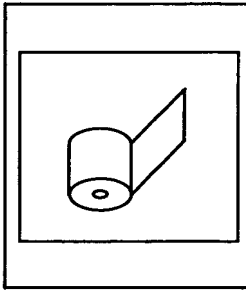
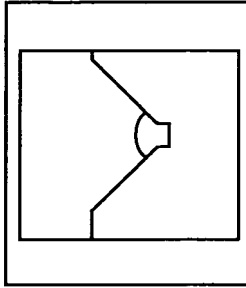
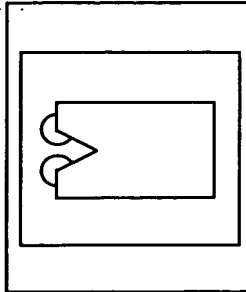
|   |  |   |
|---|--|---|
| <div>1V DIE COUNTERMEASURE COMMERCIAL ARTICLE</div> <div>227b 227a</div>              |  |   |
| COMMERCIAL ARTICLE NAME : SELATIC DIE   |  |   |
| FEATURE : LIGHT & INEXPENSIVE   |  |   |
| PROPER MATERIAL QUALITY : STAINLESS STEEL, IRON, BONDERIZING THIN PLATE               |  |   |
| ACCORDING TO SELECTION OF PICTURE, EXPLANATION IS DISPLAYED ON BLUE FRAME             |  |   |
|   |   |   |
| SELATIC DIE   | HARD PLATING   | URETHANE SHEET  |
|  |  |  |
| SELATIC DIE   | HARD PLATING   | URETHANE SHEET  |

FIG. 15

229

15/43

09/720250

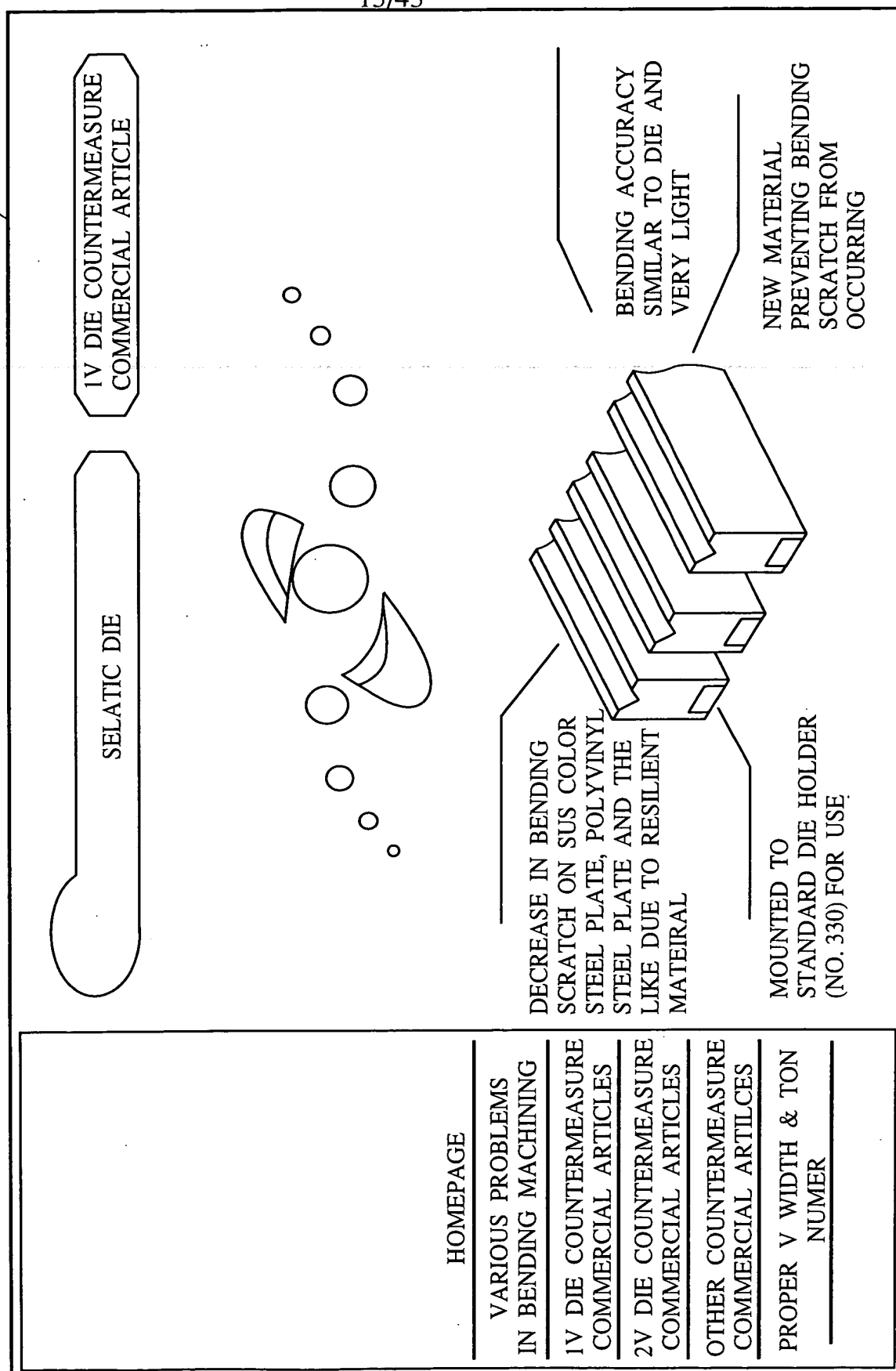


FIG. 16

PUNCHING

BENDING

SET

TRIMMING {P1}

231b

STANDARD {Q1}

SPECIAL SHAPE {Q1}

FORMING {P2}

BURRING {Q3}

EMBOSSING {Q4}

COUNTERSINK {Q5}

DOWELING {Q6}

LOUVRE {Q7}

COUNTERSINK {Q8}

MARKING {Q9}

HALF SHEAR {QA}

KNOCK OUT {QB}

SHAPE FIGURE

231c

ROUND

SQUARE

SD

CENTER PUNCH

ADAPTIVE FIGURE

231d

SELECTION

CLOSE

231a

231



FIG. 17

233

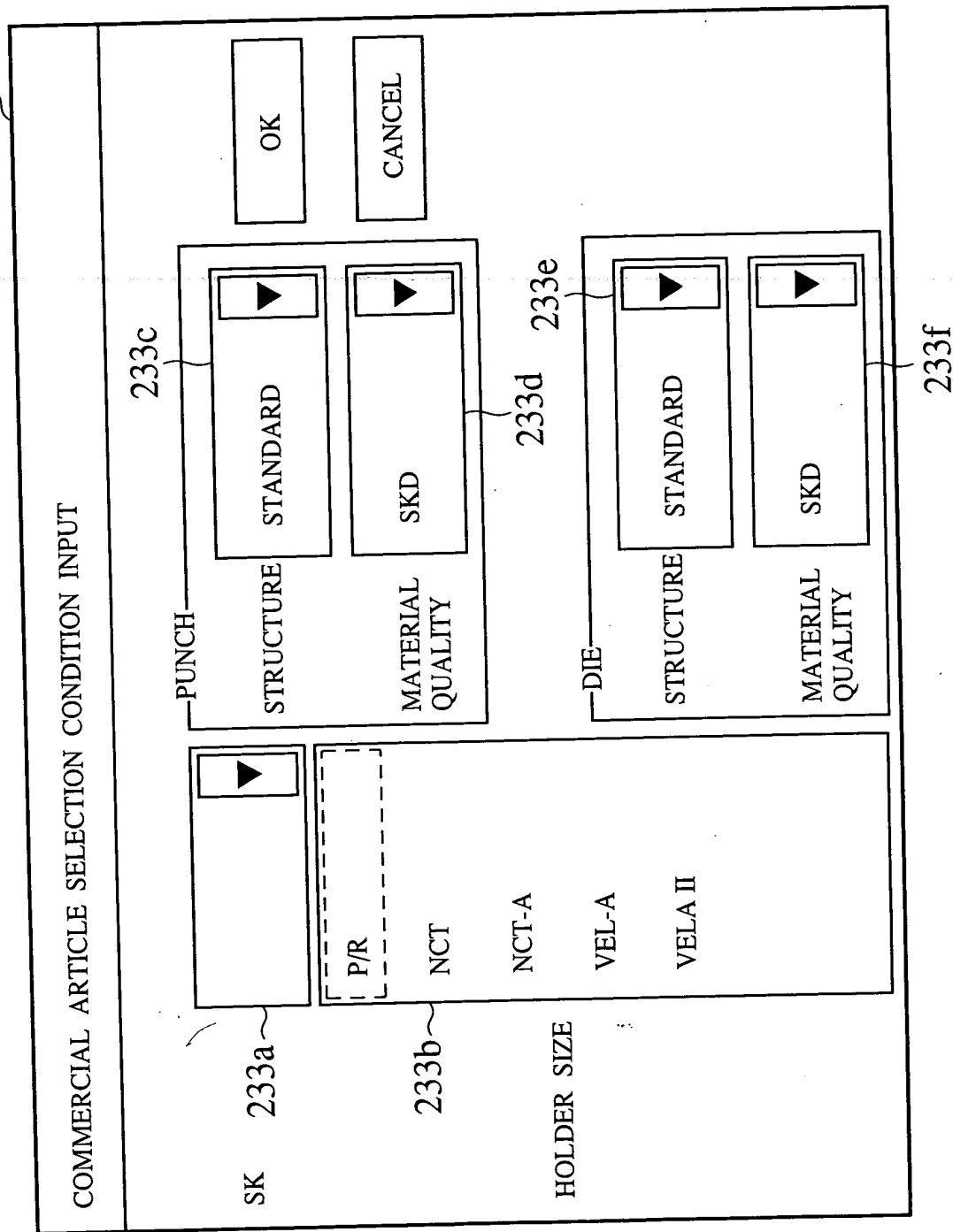


FIG.18

233

COMMERCIAL ARTICLE SELECTION CONDITION INPUT

SK 233a

NCT

233b

HOLDER SIZE

1 1/4"

PUNCH

STRUCTURE

STANDARD

MATERIAL QUALITY

SKD

DIE

STRUCTURE

STANDARD

MATERIAL QUALITY

SKD

OK

CANCEL

00000005222200

FIG.19

COMMERCIAL ARTICLE SELECTION CONDITION INPUT

|             |                 |  |                                 |
|-------------|-----------------|--|---------------------------------|
| SK          | <div>NCT</div>  | <div>PUNCH</div> <div><div>STRUCTURE</div><div>STANDARD</div></div> <div><div>MATERIAL QUALITY</div><div>SKD</div></div> | <div>OK</div> <div>CANCEL</div> |
| HOLDER SIZE | <div>11/4</div> | <div>DIE</div> <div><div>STRUCTURE</div><div>STANDARD</div></div> <div><div>MATERIAL QUALITY</div><div>SKD</div></div>   |                                 |

FIG.20

235

**PARTS LIST**

11/4 AIR BLOW

12.71 ~ 30.0 φ

235a

**SPEC.**

**DETAILED FIGURE**

| No. | COMMERCIAL ARTICLE NAME | UNIT PRICE | QUANTITY |
|-----|-------------------------|------------|----------|
| 01  | SET ASSY                | XX,XXX     |          |
| 02  | PUNCH ASSY              | XX,XXX     |          |
| 03  | PUNCH BODY              | XX,XXX     |          |
| 04  | DIE                     | X,XXX      |          |
| 05  | PUNCH GUIDE             | XX,XXX     |          |
| 06  | PUNCH HEAD              | X,XXX      |          |

235b

**SIZE INPUT**

A SIZE

B SIZE

CLEARANCE

DEDICATED KEY

CORNER R

**SPECIAL MENTION**

**SELECTION**

**CLOSE**

FIG.21

COMMERCIAL ARTICLE SELECTION

PUNCHING BENDING SET

NON-PATTERN

237

237a

237b

TRIMMING {P1}

STANDARD {Q1}

SPECIAL SHAPE {Q2}

FORMING {P2}

BURRING {Q3}

EMBOSSING {Q4}

COUNTERSINK {Q5}

DOWELING {Q6}

LOUVRE {Q7}

COUNTERSINK {Q8}

MARKING {Q9}

HALF SHEAR {QA}

KNOCK OUT {QB}

SHAPE FIGURE

I II III IV V VI VII VIII

237c

ADAPTIVE FIGURE

237d

SELECTION

CLOSE

FIG.22

COMMERCIAL ARTICLE SELECTION

PUNCHING

TRIMMING <P1>

STANDARD <Q1>

SPECIAL SHAPE <Q2>

BENDING

FORMING <P2>

BURRING <Q3>

EMBOSSING <Q4>

COUNTERSINK <Q5>

DOWELING <Q6>

LOUVRE <Q7>

COUNTERSINK <Q8>

MARKING <Q9>

HALF SHEAR <QA>

KNOCK OUT <QB>

NON-PATTERN

SHAPE FIGURE

| I | II | III | IV | V | VI | VII | VIII |
|---|----|-----|----|---|----|-----|------|
|   |    |     |    |   |    |     |      |
|   |    |     |    |   |    |     |      |

239b

ADAPTIVE FIGURE

SELECTION

CLOSE

239a

FIG. 23

FIG. 23

MACHINING POSSIBILITY

SIZE INPUT PATTERN 1/8

241b

241a

ITEM

VALUE

A

10

B

0

K

0

R

0

S

0

KY

270

SIZE

241c

SK

NCT

241e

HOLDER SIZE

1/2"

241f

PUNCH

STRUCTURE

STANDARD

241g

MATERIAL

QUALITY

SKD

241h

DIE

STRUCTURE

STANDARD

241i

MATERIAL

QUALITY

SKD

241j

TOTAL SHOTS

241n

CANCEL

241d

MACHINED MATERIAL

PLATE THICKNESS

MATERIAL QUALITY

SPCC

CLEARANCE

241k

MACHINING POSSIBILITY

CANCEL

241l

FIGURE SIZE

ENLARGEMENT

REDUCTION

241m

FIGURE POSITION

UP

CENTER

DOWN

LEFT

RIGHT

PRINT

A

X-AXIS

B

R

K

S



052027/60

09/720250

23/43

FIG. 24

243b

MACHINING POSSIBILITY 243a

SIZE INPUT PATTERN 3/8 [ ] [ ] P102-02

24/43

243d

| ITEM | VALUE |
|------|-------|
| B    | 0     |
| C    | 0     |
| L    | 0     |
| R    | 0     |
| S    | 0     |
| KY   | 270   |

MACHINED MATERIAL

PLATE THICKNESS [ ]

MATERIAL QUALITY SPCC [ ]

CLEARANCE [ ]

243e SK [ ] NCT [ ]

243f HOLDER SIZE [ ] 1/2" [ ]

243g PUNCH STRUCTURE STANDARD [ ]

243h MATERIAL QUALITY SKD [ ]

243i DIE STRUCTURE STANDARD [ ]

243j MATERIAL QUALITY SKD [ ]

TOTAL SHOTS [ ]

243k MACHINING POSSIBILITY [ ] CANCEL [ ]

FIGURE SIZE

[ ] ENLARGEMENT

[ ] REDUCTION

FIGURE POSITION

[ ] UP [ ] DOWN

[ ] LEFT [ ] RIGHT

FIGURE PRINT

[ ] PRINT



FIG. 25

245a

MACHINING POSSIBILITY

SIZE INPUT PATTERN 3/8 <> P102-02

245

245d

245f

245b

245g

245a

245d

SK NCT

HOLDER SIZE 2"

PUNCH STRUCTURE STANDARD

MATERIAL QUALITY SKD

DIE STRUCTURE STANDARD

MATERIAL QUALITY SKD

TOTAL SHOTS 1

245f

| ITEM | VALUE |
|------|-------|
| B    | 15    |
| C    | 15    |
| L    | 75    |
| R    | 1     |
| S    | 1     |
| KY   | 180   |

MACHINED MATERIAL

PLATE THICKNESS 1

MATERIAL QUALITY SPCC

CLEARANCE 0.15

245b

MACHINING POSSIBILITY [SELECTION] [CANCEL]

FIGURE SIZE

ENLARGEMENT

REDUCTION

FIGURE POSITION

UP

CENTER

DOWN

LEFT

RIGHT

FIGURE PRINT

PRINT

\*CAPABLE OF MACHINING 245c

26/43

FIG.26

247

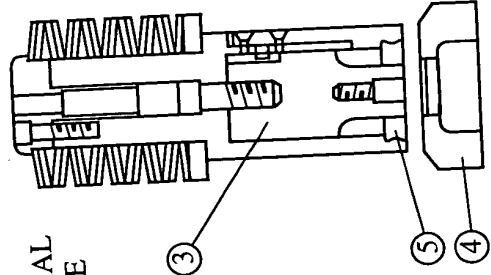
247b

247c

247a

1/1

2" SPECIAL SHAPE



INScribed IN 50.8 φ

SPEC.

DETAILED FIGURE

| No. | COMMERCIAL ARTICLE NAME | UNIT PRICE | QUANTITY |
|-----|-------------------------|------------|----------|
| 01  | SET ASSY                | XX,XXX     |          |
| 02  | PUNCH ASSY              | XX,XXX     |          |
| 03  | PUNCH BODY              | XX,XXX     |          |
| 04  | DIE                     | XX,XXX     |          |
| 05  | STRIPPER PLATE          | X,XXX      |          |

SPECIAL MENTION

SELECTION

CLOSE

27/43

FIG.27

249

249a

COMMERCIAL ARTICLE SELECTION

PUNCHING BENDING SET

NON-PATTERN

SHAPE FIGURE 249c

SHAPE FIGURE 249d

ADAPTIVE FIGURE ~ 249e

SELECTION

CLOSE

ONE TOUCH <B1>  
 SK=11- <C0>  
 PUNCH HOLDER <C1>  
 PUNCH <C2>  
 STANDARD PUNCH <D8>  
 THICK MATERIAL PUNCH <D9>  
 GOOSE NECK (H90) ~ 249b  
 GOOSE NECK G SERIES  
 FRONT RECESS, FR <DC>  
 FOR SASH (H70~100  
 POINT PUNCH (H95 <  
 ACUTE-ANGLED PUNCH(H67~  
 FLATENING PUNCH  
 ALP PUNCH <DH>  
 R PUNCH <D1>  
 HINGE PUNCH <D,  
 MIDDLE HAND PUNCH (H8  
 CLOSING PUNCH  
 DIE <C3>  
 STEP BENDING/L-SHAPE BENDING <CJ>  
 STANDARD <B2>  
 SK=10- <C7>  
 PUNCH HOLDER <C8>  
 PUNCH <C9>  
 DIE <CA>  
 MEASURING INSTRUMENT <CG>  
 TOOL BOX <CH>  
 STEP BENDING/L-SHAPE BENDING <C1>  
 SELECTION FROM WORKPIECE <B3>

453 155 H=90 88°

452 150 H=90 88°

462 151 H=90 90°

463 156 H=90 90°

045 050 H=105 88°

046 051 H=105 90°

047 052 H=120 88°

048 053 H=120 90°

FIG.27 09/720250

251

FIG. 28

251a

251b

251d

251c

| PARTS LIST         |                               |            |          |
|--------------------|-------------------------------|------------|----------|
| 1/1                |                               |            |          |
| NO. 453 TYPE (H90) |                               |            |          |
| No                 | COMMERCIAL ARTICLE NAME       | UNIT PRICE | QUANTITY |
| 1                  | 01 GOOSE PUNCH #453(L)        | xxx,xxx    | 1        |
|                    | 01 GOOSE PUNCH #453(S)        | xx,xxx     |          |
|                    | 01 GOOSE PUNCH #453(DIVISION) | xxx,xxx    |          |

120

DIVISION EAR SHAPE

TIP END R : 0.2, 0.6, 0.8, 1.5, 3.0

NO TIP END R

TIP END R .2

SPECIAL MENTION

SELECTION

CLOSE

FIG. 29

29/43

253

SPECIAL MENTION ITEM SELECTION

COMMERCIAL ARTICLE

11 453021

ONE TOUCH 88' GOOSE NECK 0.2R L

253b

APPLICABLE SPECIAL MENTION ITEM

001 CUSTOMER SPECIFIED MARK

002 CHECK TABLE ATTACHED

023 CUT SIZE WITHOUT EAR

024 MATCHING OF CUSTOMER DIE HEIGHT

032 DESIGNATION OF RIGHT EAR LENGTH

033 DESIGNATION OF LEFT EAR LENGTH

253a

253d

253c

APPLIED SPECIAL MENTION ITEM

253g

ADDITIONAL MACHINING

TIP END ANGLE/R CHANGE

TIP END ANGLE CHANGE

TIP END R CHANGE

SPECIAL EAR

PRODUCT RECESS

253f

253e

OK

CLOSE

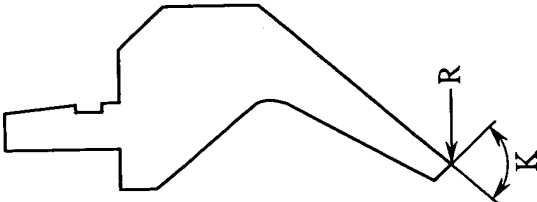
FIG.30

255

30/43

# MACHINING POSSIBILITY

TIP END ANGLE CHANGE ~ 255b



| SIZE |       |
|------|-------|
| ITEM | VALUE |
| K    | 80    |
| R    | 0.2   |

255c

255d

255e

255f

MACHINED MATERIAL V WIDTH

PLATE THICKNESS 6

MATERIAL QUALITY SPHC 255g

TOTAL SHOTS 1

255i

255h

MACHINING POSSIBILITY

SELECTION

CANCEL

GUIDANCE: RESISTING PRESSURE IS 45 TON/M AND WORKING REQUIRING PRESSURE IS 52 TON/M (CALCULATION AS V WIDTH = 48 MM)

WARNING: RESISTING PRESSURE INSUFFICIENT ~ 255k

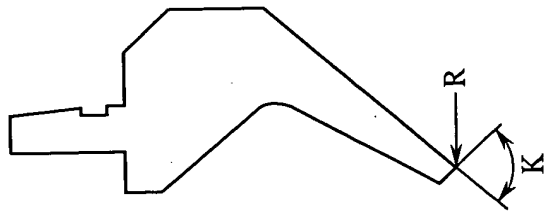
255j

FIG.31

257

257a

MACHINING POSSIBILITY



TP END ANGLE CHANGE ~257b

| ITEM | VALUE |
|------|-------|
| K    | 30    |
| R    | 0.2   |

257c

257d

257e

257f

MACHINED MATERIAL V WIDTH

PLATE THICKNESS 1

V WIDTH

MATERIAL QUALITY SPHC

257g

TOTAL SHOTS 1

257h

MACHINING POSSIBILITY

CANCEL

ERROR : PLEASE INPUT A VALUE IN RANGE OF  $70 \leq K \leq 90$  INTO K SIZE ~257j

FIG. 32

528 Rec'd PCT/PTD 08 JAN 2001

09/720250

32/43

|   |  |   |  |   |  |  |  |
|---|--|---|--|---|--|--|--|
| ESTIMATE PARENT NO. <span style="border: 1px solid black; padding: 2px;">A700000</span> |  | [DELIVERY] (LIMITED COMPANY) A WORKS/<br>[CONTRACT] (LIMITED COMPANY) A WORKS |  | 259a  |  | ITEM FOR<br>ORDER RECEPTION  |  |
| ESTIMATE  |  | ESTIMATE DETAILS  |  | BLANKET DELIVERY  |  | INPUT <span style="border: 1px solid black; padding: 2px;">10</span> |  |
| DISCOUNT RATE   |  | <input type="checkbox"/> EXCESS APPLICATION                                   |  | <input type="checkbox"/> MAIL RESPONSE FOR<br>PREPARED HOLE SIZE? |  | DELETE   |  |
| <input type="radio"/> APPLICATION   |  | <input type="checkbox"/> SIMULTANEOUS<br>TRIAL PUNCHING                       |  | <input checked="" type="checkbox"/> STRIP AMOUNT DISPLAY?         |  | FIGURE REQUIRED?   |  |
| <input type="radio"/> FIX <span style="border: 1px solid black; padding: 2px;"> </span> |  | COMMERCIAL<br>ARTICLE NAME  |  | CORNER<br>R   |  | DEDICATED<br>KEY   |  |
| SHAPE   |  | A<br>SIZE   |  | B<br>SIZE   |  | ESTIMATE<br>AMOUNT   |  |
| QUANTITY  |  | ONE TOUCH 88° GOOSE NECK  |  | XX,XXX  |  | CONFIRMATION   |  |
| SK Cat-No.  |  | 1 11 453021   |  | 000   |  | COMMERCIAL<br>ARTICLE<br>RETRIEVAL                                   |  |
| Seq   |  | 2 11 45302E   |  | 000   |  | SEPARATE DIE   |  |
| 1 11 453021   |  | 1 000   |  | No.453 TYPE OF ANGLE, R ADDITIONAL MACHINING                      |  | CLEAR <span style="border: 1px solid black; padding: 2px;"> </span>  |  |
| 2 11 45302E   |  | 1 000   |  | XX,XXX  |  | CALCULATION  |  |
| TOTAL AMOUNT  |  | XXX,XXX   |  | DISCOUNT AMOUNT   |  | XX,XXX   |  |
| ESTIMATE AMOUNT   |  | XXX,XXX   |  | 259m  |  | ESTIMATE ISSUE   |  |
| COMMERCIAL<br>ARTICLE NAME  |  | No.453 TYPE OF ANGLE, R ADDITIONAL<br>MACHINING (B4530KT)                     |  | SPECIAL MENTION ITEM  |  | 259n   |  |
| UNIT PRICE  |  | XXX,XXX   |  | PRICE   |  | 259o   |  |
| REFERENCE<br>DELIVERY TIME  |  | 5   |  | DELIVERABLE<br>DAY  |  | 259p   |  |
| MARKING No.   |  | 10(%)   |  | CUSTOMER<br>REQUEST DAY   |  | 259q   |  |
| DISCOUNT RATE   |  | 10(%)   |  | DISCOUNT<br>AMOUNT  |  | 259r   |  |
| ORDER RECEPTION DECISION  |  | <input type="checkbox"/> FAX  |  | ORDER ACKNOWLEDGMENT  |  | 259s   |  |



261

FIG.33

ITEM FOR ORDER RECEPTION

ESTIMATE PARENT NO.

[DELIVERY] (LIMITED COMPANY) A WORKS/

[CONTRACT] (LIMITED COMPANY) A WORKS

261a

ESTIMATE

ESTIMATE DETAILS

☐ EXCESS APPLICATION

☐ MAIL RESPONSE FOR PREPARED HOLE SIZE?

☐ BLANKET DELIVERY

☐ SIMULTANEOUS TRIAL PUNCHING

☒ STRIP AMOUNT DISPLAY?

☐ CONFIRMATION FIGURE REQUIRED?

10

DELETE

CANCEL

COMMERCIAL ARTICLE SELECTION

SIZE CONFIRMATION

COMMERCIAL ARTICLE RETRIEVAL

PAST SALES

SEPARATE DIE

CLEAR

261e

| Seq | SK | Cat-No. | QUANTITY | SHAPE | COMMERCIAL ARTICLE NAME | A SIZE | B SIZE | CLEAR | CORNER R | DEDICATED KEY | ESTIMATE AMOUNT |
|-----|----|---------|----------|-------|-------------------------|--------|--------|-------|----------|---------------|-----------------|
| 1   | 10 | 004021  | 1        | 000   | 88° PUNCH 0.2RL         | 20     | 20     |       |          |               | XX,XXX          |
| 2   | 11 | 322040  | 1        | 002   | 11/4"OH SHAPE           | 20     | 20     |       |          |               | XXX,XXX         |

261b

TOTAL AMOUNT XXX,XXX

DISCOUNT AMOUNT XX,XXX

ESTIMATE AMOUNT XXX,XXX

261f

COMMERCIAL ARTICLE NAME

88° PUNCH 0.2RL

PRICE XX,XXX

DELIVERABLE DAY

1998/06/30

261d

REFERENCE DELIVERY TIME

1

CUSTOMER REQUEST DAY

/ /

MARKING No.

DISCOUNT

XX,XXX

DISCOUNT RATE 10(%)

261g

ORDER RECEPTION DECISION

ORDER ACKNOWLEDGMENT

261h

261i

FAX

34/43

## FIG.34

ESTIMATE ~ 263

JUNE 23, 1998

PAGE 1

No. A700000

LIMITED COMPANY A WORKS

REGARDING YOUR INQUIRY OF NO.XXXXX DATED JUNE 23, WE ESTIMATE  
THIS CASE AS FOLLOWS, THEREFORE PLEASE LET US HAVE YOUR ORDER  
REGARDING THIS CASE.

263a

DELIVERY TIME AS FOLLOWS

263b

DELIVERY PLACE YOUR DESIGNATED PLACE

TEL  
FAX

263c

PAYMENT CONDITION AS USUAL

263d

DELIVERY CONDITION DELIVERY

263e

EFFECTIVE TERM OF ESTIMATE

|  |  |  |  |
|--|--|--|--|
|  |  |  |  |
|--|--|--|--|

263f

| TOTAL AMOUNT      ¥ 221,580- |   |          |                |         |               |
|------------------------------|---|----------|----------------|---------|---------------|
| ITEM                         | ARTICLE NAME SPEC.  | QUANTITY | UNIT PRICE     | AMOUNT  | DELIVERY TIME |
| A700045-001                  | ONE TOUCH 88°<br>GOOSE NECK 0.2R L No.:453021                     | 1        | XXX,XXX        | XXX,XXX |               |
| A700045-002                  | ONE TOUCH No.453 TYPE OF ANGLE<br>R ADDITIONAL MACHINIG (B4530KT) | 1        | XXX,XXX        | XXX,XXX |               |
|                              |   | 1        | TOTAL AMOUNT   | XXX,XXX |               |
|                              |   |          | YOUR DISCOUNT  | XX,XXX  |               |
|                              |   |          | PROPOSED PRICE | XXX,XXX |               |
|                              | - BLANK BELOW -   |          |                |         |               |
|                              |   |          |                |         |               |
|                              |   |          |                |         |               |
|                              |   |          |                |         |               |
|                              |   |          |                |         |               |

263g 263h

263i

T08040 09020200

FIG.35

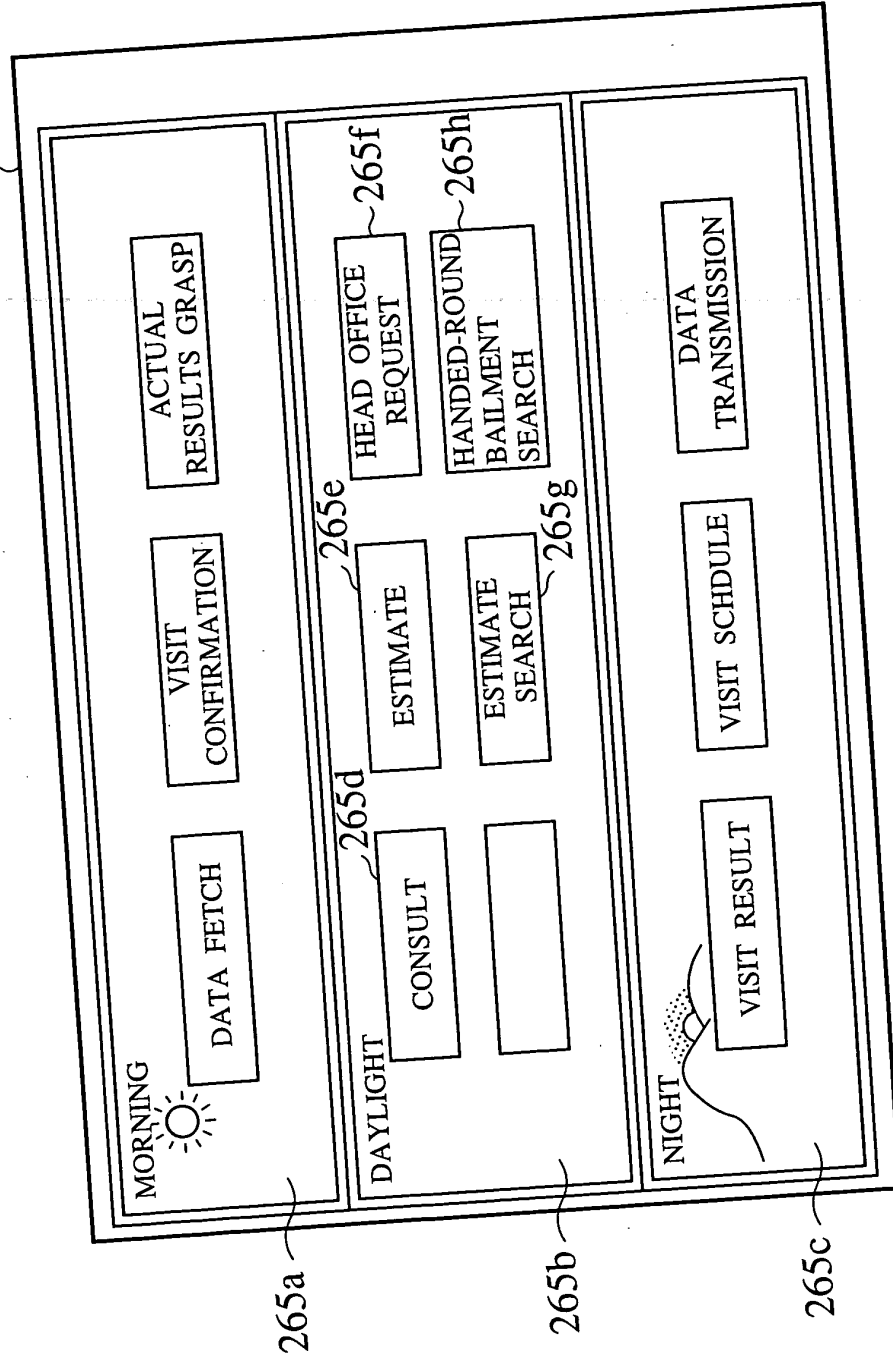


FIG.36

270

| COMMERCIAL ARTICLE SELECTION   |  |   |
|--|--|---|
| <div style="margin-bottom: 10px;"> <input type="checkbox"/> PUNCHING    <input type="checkbox"/> BENDING    <input type="checkbox"/> SET         </div> <div>           ONE TOUCH &lt;B1&gt;<br/>               -SK=11 - &lt;C0&gt;<br/> <input type="checkbox"/> PUNCH HOLDER &lt;C1&gt;<br/> <input type="checkbox"/> PUNCH &lt;C2&gt;<br/> <input type="checkbox"/> DIE &lt;C3&gt;<br/>               STEP BENDING/L-SHAPE BENDING &lt;CJ&gt;<br/> <input type="checkbox"/> STANDARD &lt;B2&gt;<br/>               -SK=10 - &lt;C7&gt;<br/> <input type="checkbox"/> PUNCH HOLDER &lt;C8&gt;<br/> <input type="checkbox"/> PUNCH &lt;C9&gt;<br/> <input type="checkbox"/> DIE &lt;CA&gt;<br/> <input type="checkbox"/> MEASURING INSTRUMENT &lt;CG&gt;<br/> <input type="checkbox"/> TOOL BOX &lt;CH&gt;<br/>               STEP BENDING/L-SHAPE BENDING &lt;C1&gt;<br/> <b><input type="checkbox"/> SELECTION FROM WORKPIECE &lt;B3&gt;</b> </div> | <div style="margin-top: 10px; text-align: center;">             270a           </div> <div style="height: 150px; margin-top: 10px;"></div> <div style="position: absolute; bottom: 10px; right: 10px;"> <input type="checkbox"/> IMAGE INDICATION           </div> | <div style="text-align: center; font-weight: bold;">NON-PATTERN</div> <div style="margin-top: 10px;">             SHAPE FIGURE<br/>             I     270c     SELECTION OF WORKPIECE SHAPE           </div> <div style="text-align: center; height: 150px; margin-top: 10px;"> </div> <div style="margin-top: 10px; text-align: center;">             ADAPTIVE FIGURE           </div> <div style="text-align: center; height: 150px; margin-top: 10px;"> <div style="float: left; width: 40%;">SELECTION</div> <div style="float: right; width: 40%;">CLOSE</div> <div style="clear: both;"></div> </div> |



FIG. 38

[illegible]

FIG. 39

FIG. 3

GR ES

Se

CO AR UN RE DE MA

PUNCHING BENDING SET SHAPE FIGURE

ONE TOUCH (B1)

ONE TOUCH

WORKPIECE SIZE

INPUT

PLATE THICKNESS 1.2 mm

W SIZE L SIZE

(WIDTH) = (DEPTH) =

25 mm 50 mm mm mm

mm mm mm mm

INPUT PATTERN

W=25.00 L=50.00 F=00

CANCEL

HOLDER TYPE O Z I O Z II

DIE PLEASE SELECT

No.453

ALP (FOR BR RECESS No.4)

No.045

No.047

No.516

CLEAR FIGURE

RETURN TO MENU

DETAIL

ADDITIONAL MACHINING & RESISTING PRESSURE CALCULATION

278

FIG.40

|  |  |                       |  |
|--|--|-----------------------|--|
| PUNCHING BENDING SET                   |  | NON-PATTERN           |  |
| [WORKPIECE MATERIAL QUALITY SELECTION] |  |                       |  |
| TENSILE STRENGTH=28                    |  | SPCC 1.2t             |  |
| [DIE SELECTION]                        |  |                       |  |
| INWARDLY BENDING RADIUS $\approx V/6$  |  |                       |  |
| O 1V DIE O 2V DIE                      |  |                       |  |
| V WIDTH 8                              |  | V ANGLE 88°           |  |
| 124(8×12)                              |  | 30310(8×12)           |  |
| [CALCULATION RESULT]                   |  |                       |  |
| BENDING TONS = BOTTOMING               |  |                       |  |
| PUNCH WARRANTY                         |  | 50 ton/m              |  |
| RESISTING PRESSURE                     |  | 80 ton/m              |  |
| DIE WARRANTY                           |  | 12.0 ton/m            |  |
| RESISTING PRESSURE                     |  | 5.5mm                 |  |
| BENDING TONS                           |  | RESISTING PRESSURE OK |  |
| MINIMUM FLANGE LENGTH                  |  | RESISTING PRESSURE OK |  |
| PUNCH RESISTING PRESSURE               |  | RESISTING PRESSURE OK |  |
| DIE RESISTING PRESSURE                 |  | 0.02mm                |  |
| DIE WARPING                            |  | REFER TO AMOUNT       |  |
| RETURN                                 |  | FEFER TO AMOUNT       |  |

276a

278a

278b

272a

278

X=-19.464 Y=49.598 [No.453]

×1.0

DETAIL

ADDITIONAL MACHINING & RESISTING PRESSURE CALCULATION



280

FIG.41

GR  
ES

PUNCHING

BENDING

SET

NON-PATTERN

ONE TOUCH (P1)

SHAPE FIGURE

REFER TO CATNO DECISION & PRICE

BLADE EDGE ANGLE  
○ [88°] ○ 90° ○ OTHERS

LENGTH  
○ 835mm(L) ○ 415mm(S) ○ DIVISION

TIP END R  
○ 0.2R ○ 0.6R ○ 0.8R ○ 1.5R ○ 3.0R

DIE & CATNO  
GOOSE NECK PUNCH 6mm  
453021

PRICE

DIE FEE  
280a  
XXX,XXX

280b  
ADDITIONAL  
MACHINING FEE  
XX,XXX

TOTAL  
XXX,XXX

CO  
AR  
UN  
RE  
DE  
MA

Se

RETURN

DECISION

PRINT

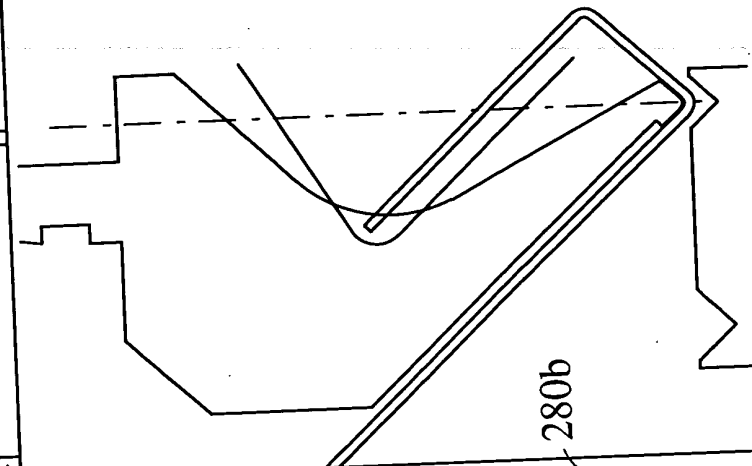
×1.0

X=-19.464

Y=49.598

[No.453]

ADDITIONAL MACHINING &  
RESISTING PRESSURE CALCULATION



282

FIG. 42

|          |         |     |                          |             |
|----------|---------|-----|--------------------------|-------------|
| PUNCHING | BENDING | SET | UNSUITABLE DIE SELECTION | NON-PATTERN |
|----------|---------|-----|--------------------------|-------------|

☒ ONE TOUCH (R1)

SHAPE FIGURE

○ STANDARD    ⊙ ONE TOUCH    ◆

**[WORKPIECE SIZE]**

...INPUT

PLATE THICKNESS  mm

W SIZE L SIZE

(WIDTH)= (DEPTH)=

mm    mm   mm

mm    mm   mm

**[ INPUT PATTERN ]**

ADDITION AND DRAWING

**[ HOLDER TYPE ]**   ○ Z I   ○ Z II

**[ DIE ]** ...PLEASE SELECT

No.004

No.004 (FOR BR RECESS No.1)

No.004 (FOR BR RECESS No.2)

ALP (FOR BR RECESS No.3)

No.117

CANCEL

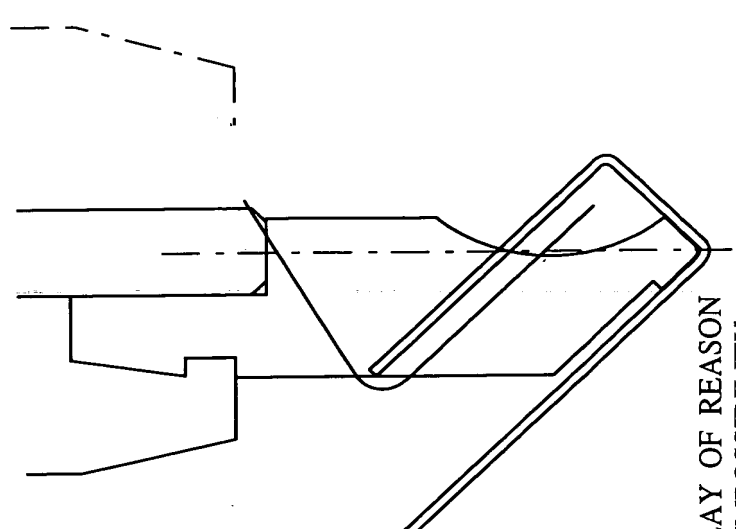
RETURN TO MENU

DETAIL

ADDITIONAL MACHINING & RESISTING PRESSURE CALCULATION

284

FIG.43

|  |       |    |    |    |    |    |    |    |                                   |       |                                 |  |              |  |                       |  |                          |  |                        |  |             |  |
|--|-------|----|----|----|----|----|----|----|-----------------------------------|-------|---------------------------------|--|--------------|--|-----------------------|--|--------------------------|--|------------------------|--|-------------|--|
| GR   | ES    | Se | CO | AR | UN | RE | DE | MA |                                   |       |                                 |  |              |  |                       |  |                          |  |                        |  |             |  |
| <div style="display: flex; justify-content: space-between; border-bottom: 1px solid black; padding-bottom: 5px;"> <span>PUNCHING</span> <span>BENDING</span> <span>SET</span> </div> <div style="display: flex; justify-content: space-between; border-bottom: 1px solid black; padding-bottom: 5px;"> <span>ADDITIONAL MACHINING JUDGEMENT</span> <span>NON-PATTERN</span> </div>   |       |    |    |    |    |    |    |    |                                   |       |                                 |  |              |  |                       |  |                          |  |                        |  |             |  |
| <div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> <p><b>[WORKPIECE MATERIAL QUALITY SELECTION]</b></p> <p>SPCC <span style="border: 1px solid black; padding: 2px;">1.2t</span></p> <p><b>[DIE SELECTION]</b></p> <p>INWARDLY BENDING RADIUS <math>\div V/6</math></p> <p>○ 1V DIE    ⊙ 2V DIE</p> <p>V WIDTH <span style="border: 1px solid black; padding: 2px;">8</span></p> <p>V ANGLE <span style="border: 1px solid black; padding: 2px;">88°</span></p> <p>124(8×12) <span style="border: 1px solid black; padding: 2px;">30310(8×12)</span></p> </div> <div style="width: 50%;"> <p><b>[CALCULATION RESULT]</b></p> <p>BENDING TONS = BOTTOMING</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%;">PUNCH WARRANTY RESISTING PRESSURE</td> <td style="width: 50%;">ton/m</td> </tr> <tr> <td>DIE WARRANTY RESISTING PRESSURE</td> <td></td> </tr> <tr> <td>BENDING TONS</td> <td></td> </tr> <tr> <td>MINIMUM FLANGE LENGTH</td> <td></td> </tr> <tr> <td>PUNCH RESISTING PRESSURE</td> <td></td> </tr> <tr> <td>DIE RESISTING PRESSURE</td> <td></td> </tr> <tr> <td>DIE WARPING</td> <td></td> </tr> </table> </div> </div> |       |    |    |    |    |    |    |    | PUNCH WARRANTY RESISTING PRESSURE | ton/m | DIE WARRANTY RESISTING PRESSURE |  | BENDING TONS |  | MINIMUM FLANGE LENGTH |  | PUNCH RESISTING PRESSURE |  | DIE RESISTING PRESSURE |  | DIE WARPING |  |
| PUNCH WARRANTY RESISTING PRESSURE  | ton/m |    |    |    |    |    |    |    |                                   |       |                                 |  |              |  |                       |  |                          |  |                        |  |             |  |
| DIE WARRANTY RESISTING PRESSURE  |       |    |    |    |    |    |    |    |                                   |       |                                 |  |              |  |                       |  |                          |  |                        |  |             |  |
| BENDING TONS   |       |    |    |    |    |    |    |    |                                   |       |                                 |  |              |  |                       |  |                          |  |                        |  |             |  |
| MINIMUM FLANGE LENGTH  |       |    |    |    |    |    |    |    |                                   |       |                                 |  |              |  |                       |  |                          |  |                        |  |             |  |
| PUNCH RESISTING PRESSURE   |       |    |    |    |    |    |    |    |                                   |       |                                 |  |              |  |                       |  |                          |  |                        |  |             |  |
| DIE RESISTING PRESSURE   |       |    |    |    |    |    |    |    |                                   |       |                                 |  |              |  |                       |  |                          |  |                        |  |             |  |
| DIE WARPING  |       |    |    |    |    |    |    |    |                                   |       |                                 |  |              |  |                       |  |                          |  |                        |  |             |  |
| <div style="display: flex; justify-content: space-between; align-items: flex-end; padding-top: 10px;"> <div style="width: 45%;"> <p><b>[REASON FOR IMPOSSIBILITY]</b></p>  <p style="text-align: center;">284a</p> </div> <div style="width: 50%;"> <p><b>[No.004]</b></p> <p>X=-19.464    Y=49.598</p> <p><span style="border: 1px solid black; padding: 2px;">×1.0</span> <span style="border: 1px solid black; padding: 2px;">1.0</span></p> </div> </div>  |       |    |    |    |    |    |    |    |                                   |       |                                 |  |              |  |                       |  |                          |  |                        |  |             |  |
| <div style="display: flex; justify-content: space-between; border-top: 1px solid black; padding-top: 5px;"> <span>DETAIL</span> <span>ADDITIONAL MACHINING &amp; RESISTING PRESSURE CALCULATION</span> </div>  |       |    |    |    |    |    |    |    |                                   |       |                                 |  |              |  |                       |  |                          |  |                        |  |             |  |
| <p>NOTE: SHORTAGE OF THICKNESS OF UPPER PORTION OF PUNCH</p> <p style="border: 1px dashed black; padding: 5px; display: inline-block;">RETURN</p>  |       |    |    |    |    |    |    |    |                                   |       |                                 |  |              |  |                       |  |                          |  |                        |  |             |  |